



STATE OF IDAHO
DIVISION OF
ENVIRONMENTAL QUALITY

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Dirk Kempthorne, Governor
C. Stephen Allred, Administrator

September 24, 1999

Mr. Robert R. Robichaud
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue, OW-130
Seattle, Washington 98101

Re: Water Quality Certifications for Spokane River NPDES Permits:
City of Coeur d'Alene ID-002285-3
Hayden Area Regional Sewer Board ID-002659-0
City of Post Falls ID-002585-2

Dear Mr. Robichaud:

The Idaho Division of Environmental Quality (DEQ) has reviewed the proposed final NPDES permits for the subject facilities, as submitted by the U.S. Environmental Protection Agency (EPA). This letter provides certification, pursuant to Section 401 of the Federal Clean Water Act, that the activities allowed under these permits will comply with applicable requirements of Sections 301, 302, 303, 306 and 307 of the Clean Water Act and the Idaho Water Quality Standards and Wastewater Treatment Requirements (IDAPA 16 Title 01, Chapter 02). A copy of this letter has been sent to the applicants to inform them of these certification requirements. The following issues shall be specifically addressed pursuant to this certification:

- 1) **Mixing Zones** - The City of Coeur d'Alene permit limits are based on a mixing zone for total ammonia, copper, total residual chlorine and pH. The City of Post Falls permit limits are based on a mixing zone for total ammonia, copper, total residual chlorine, and pH. The Hayden Area Regional Sewer Board permit limits are based on a mixing zone for total ammonia and pH. All other permits limits are based on "end of pipe" analyses. Mixing zones utilized in these permits are defined as twenty-five percent (25%) of the average seven-day low flow that occurs ten percent (10%) of the time for the periods between July through September, and October through June. DEQ certifies, pursuant to IDAPA §16.01.02.060, that the effluent limitations calculated in accordance with these specified mixing zones, will be protective of ambient water quality criteria applicable to the Spokane River. DEQ reserves its authority to modify mixing zones for these permits where it can be demonstrated that such modifications are protective of ambient water quality criteria.
- 2) **E. coli Monitoring** - DEQ anticipates promulgating new water quality standards for E. coli bacteria in the future. E. coli monitoring will be necessary prior to reissuing these NPDES permits. Therefore, E. coli monitoring shall be initiated during the fourth year of permit coverage. Monitoring shall be conducted at the same frequencies specified in the proposed final permits for fecal coliform bacteria monitoring.

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- 3) **Whole Effluent Toxicity (WET) Testing** - WET language and conditions have not changed from the pre-certification versions for Hayden or Post Falls. The permit language requires that the document "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" be used. This document explains that the static-renewal test is the best but allows continuous flow through (expensive) or static testing for Hayden and Post Falls. Coeur d'Alene's language specified static-renewal testing in the proposed final version. The price difference between static and static-renewal is supposed to be minimal. The frequency of testing did not change; it has always been semi-annual testing for five years. We note that the methods and frequency for WET testing associated with the discharges have been changed since the previous NPDES permits. It is our understanding that chronic monitoring is the most conservative form of toxicity testing and semi-annual testing ensures that sufficient information becomes available in the future for determining the need for toxicity-based effluent limits. DEQ requests that Coeur d'Alene's response to comments document address the requirement for static-renewal testing. NPDES permits do not contain the basis for the permit conditions. The response to comments document for Hayden and Coeur d'Alene addresses the need for semi-annual testing in order to obtain a site-specific CV.
- 4) **Compliance Schedules (City of Coeur d'Alene facility only)** - The City of Coeur d'Alene has justified to our satisfaction why compliance schedules for ammonia, fecal coliform bacteria, and heavy metals are necessary and appropriate. The compliance schedules will assist the city in achieving long-term compliance with effluent limitations. The need for compliance schedules and some compliance schedule requirements follow:
 - a. ***Ammonia-Nitrogen*** - The City of Coeur d'Alene has indicated that compliance with newly established concentration-based effluent limits for ammonia is questionable, particularly as wastewater flows increase toward the facility design capacity in the future. Coeur d'Alene's advanced wastewater treatment facility incorporates a trickling filter/solids contact process that was not designed to provide nitrification. Ammonia removal performance has been adequate in the past due to a recent plant expansion, and more recently, due to the addition of alum to the primary clarifiers. However, ammonia concentrations are expected to increase beyond the specified effluent concentration-based limits, as ammonia loading to the trickling filter process increases. In addition, plant managers speculate that influent ammonia concentrations may continue to increase in the future due to lower per capita water consumption, thus further decreasing the potential for compliance with ammonia limits in the future.

The city shall design and implement an influent/effluent monitoring program that satisfies the following objectives: 1) evaluate the trends in ammonia concentrations, the long-term nitrification needs for the wastewater treatment plant, and determine an appropriate treatment option; 2) determine an appropriate flow tiered implementation approach and/or schedule (including milestones) for completing the

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design, construction and start up of treatment process modifications; and 3) submit a report to DEQ and EPA for review and approval one year from the effective date of the permit, that satisfies items #1 and #2.

The city shall achieve compliance with the ammonia concentration limits specified in Table 1 of the permit, no later than two years from the effective date of the permit. The city may request an extension to this compliance schedule if it can be demonstrated, to the satisfaction of DEQ and EPA, that additional time is necessary in order to provide for the construction and start up of nitrification processes and that the limits cannot be met. A reopener provision is contained within the permit boilerplate that allows for permit modifications if/when new information becomes available that justifies such modification.

- b. **Metals** - The city has expressed some uncertainty in its ability to comply with the new permit limits for metals. This uncertainty is primarily due to limited availability of reliable heavy metals data with which to assess compliance. We also recognize that limited data has forced EPA to apply more conservative assumptions for data variability in permit limits calculations, than might otherwise have been the case if better information on heavy metals were available. DEQ believes these circumstances provide justification for a compliance schedule that satisfies the following objectives: 1) develop and implement a reasonable and acceptable heavy metals monitoring plan; 2) re-evaluate the reasonable potential of the discharge to exceed applicable water quality standards and re-evaluate permit limits; 3) where necessary and appropriate, develop site specific translators and/or WERs for metals; and, 4) where necessary, allow time for the design and implementation of treatment processes necessary to attain long-term compliance with permit limits.

The city shall submit a metals monitoring plan to DEQ and EPA for review and approval within three months from the effective date of the permit. Subsequently, the city shall submit a metals monitoring report to DEQ and EPA one year from the effective date of the permit that summarizes monitoring data and specifies the following: 1) if compliance was met with the final effluent limits; 2) recommendations for the development of WERs and/or site specific translators to be applied to final permit limits; and, 3) where necessary, provide a schedule, including milestones for completing the design, implementation and start up of treatment process modifications.

The city shall achieve compliance with the permit limits for metals specified in Table 1 of the permit, no later than two years from the effective date of the permit. The city may request an extension to this compliance schedule if it can be demonstrated, to the satisfaction of DEQ and EPA, that additional time is necessary in order to provide for the construction and start up of additional treatment processes and that the current permit limits cannot be met.

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- c. ***Fecal Coliform*** - The city has requested a compliance schedule that enables them to design and construct automated equipment within the facility disinfection system, and subsequently comply with new maximum daily limits for fecal coliform while maintaining compliance with total chlorine residual permit limits.

The city shall achieve compliance with the maximum daily limits for fecal coliform bacteria as specified in Table 1 of the permit, no later than two years from the effective date of the permit. The city shall submit a facility plan addressing disinfection system modifications to DEQ within six months from the effective date of the permit. The plan shall include a schedule, including milestones, for completing the construction and start up of proposed modifications. The DEQ approved facility plan shall be submitted to EPA one year from the effective date of the permit.

Please be aware that interested third parties may appeal this Section 401 water quality certification, by submitting a request in writing within thirty-five days, for a hearing pursuant to Idaho Code, Title 67, Chapter 52 and The Rules Governing Contested Case Proceedings and Declaratory Rulings, IDAPA 16.05.03.000 to 16.05.03.999. The request for a hearing must be filed with the hearing coordinator at the following address: Hearing Coordinator, Administrative Procedure Section, Department of Health and Welfare, P.O. Box 83720, Boise, Idaho 838720-0036.

Sincerely,



Gwen P. Fransen
Regional Administrator

cc: Doug Madigan, City of Post Falls
Kent Helmer, Hayden Area Regional Sewer Board
Sid Fredricksen, City of Coeur d'Alene